

REMARKS

Upon entry of this amendment, claims 1 – 26 will be pending.

The Applicants appreciate the Examiner's continued attention and consideration.

Claims 16 – 20 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claims 16 – 20 have each been amended, as suggested by the Examiner, to include a preamble which recites: "*A computer program product stored on a computer-readable medium ...*".

In view of the forgoing amendments, Applicant requests that the rejection be withdrawn.

Claims 1 – 26 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Owechko et al. (U.S. 2003/0204384 A1).

Claims 1 – 26 are also rejected under 35 U.S.C. 102(e) as being clearly anticipated by Owechko et al.

The Applicant was well aware of the Owechko et al. device at the time of filing this application. Owechko et al. was duly identified and incorporated by reference within this application. Refer paragraph [0007] on page 3.

Independent claims 1, 16 and 21 have been amended to more precisely distinguish over the art of record. Claim 1 now specifies: "*A method of object detection comprising the steps of: receiving images of an area occupied by at least one object; extracting a plurality of differing image features including wavelet features from the images via separate extraction modules; and performing classification on the plurality of differing image features as a unified group in at least one common classification algorithm to produce object class confidence data.*".

In the present invention, feature extraction modules 302, 304 and 306 receive and process frames from the stream of images 300 to provide discrete feature data 308, 310 and 312. Each of the feature data 308, 310 and 312 is input into a common classification algorithm stored in a common classifier module 314. The common classification algorithm performs classification on feature data 308, 310 and 312 as a unified group.

The Owechko et al. device provides a separate classifier for each extraction module. Each of the features is individually processed by respective classification algorithms to produce class confidences of various occupant types. The separate class confidences are thereafter fused and processed to determine an occupant type. Refer paragraph [0007] on page 3 of the present application.

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Independent claims 16 and 21 have been amended in a manner similar to that of independent claim 1, and are thus, similarly distinguishable from Owechko et al. for the reasons set forth hereinabove.

Claims 2 – 15, 17 – 20 and 22 – 26, depend, directly or indirectly, from one of the independent claims, and, thus, are also distinguished from Owechko et al. for the same reasons.

In view of the amendments, it is requested that the rejections be withdrawn.

Claims 1, 2, 6, 7, 9, 11, 16 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Peele et al. (U.S. 5,561,431).

Peele et al. discloses the use of separate classification processors for each image feature. Independent claims 1, 16 and 21, as presently amended, clearly distinguish over Peele et al. for the reasons set forth hereinabove.

Accordingly, it is requested that the rejection be withdrawn.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peele et al. in view of Dyckhoff et al. (NPL document entitled, “Generalized Means as Model of Compensative Connectives”).

Claims 1 – 5, 10, 11, 14, 16 – 18 and 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klomark (NPL document titled, “Occupant Detection using Computer Vision”) in view of Papageorgiou et al. (NPL document titled, “Trainable Pedestrian Detection”).

Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klomark in view of Papageorgiou et al. further in view of Mengko et al. (NPL document titled, “Design and Implementation of Object Detection and Classification System Based on Deformation Template Algorithm”).

Claims 13, 15, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klomark in view of Papageorgiou et al. further in view of Konrad et al. (NPL document titled, “Dense Disparity Estimation from Feature Correspondences”).

Claims 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klomark in view of Papageorgiou et al. further in view of Mengko further in view of Konrad.

None of the art of record, taken alone or in combination, is believed to disclose or anticipate the present invention as presently claimed. The distinctions described

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hereinabove with regard to the 35 U.S.C. 102 rejections apply equally to the varied rejections based upon 35 U.S.C. 103(a).

Accordingly, it is requested that the above rejections based upon 35 U.S.C. 103(a) be withdrawn.

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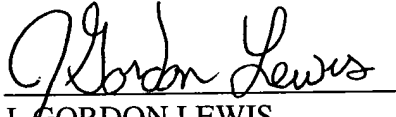
Conclusion

Applicant believes, in view of the amendments and remarks herein, that all grounds of rejection of the claims have been addressed and overcome, and that all claims are in condition for allowance.

If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the telephone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication and/or credit any overpayments to Deposit Account No. 50-0831.

Respectfully submitted,

A handwritten signature in cursive script, reading "J. Gordon Lewis", is written over a horizontal line.

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